

more lymph node counts in RANU group. We think RANU was more suitable in patients with UTUC undergone operation with lymph node dissection.

ISTUA Podium-3

Other

IPD14:

CONTINUOUS POSITIVE AIRWAY PRESSURE THERAPY IMPROVES STAGE 1 AND STAGE 2 SLEEP NOCTURIA IN INDIVIDUALS WITH OBSTRUCTIVE SLEEP APNEA

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Purpose: Nocturia is common in patients with obstructive sleep apnea (OSA). The data on nocturia and the sleep architecture for patients undergoing continuous positive airway pressure (CPAP) therapy are scarce. This study evaluates the efficacy of treatment and the change in nocturia prevalence under the CPAP therapy in patients with OSA.

Materials and Methods: This prospective clinical study was conducted from February 2012 to January 2013. A patient was defined as having nocturia if it occurred twice or more per night and lasted over 3 months. The diagnosis of OSA was established by a standard full night in-laboratory polysomnography (PSG). The voiding diaries were recorded. Eligible nocturia patients with OSA were further arranged a CPAP titration.

Results: Twenty-five nocturia male patients were enrolled into our series, and 23 met the diagnosis of OSA (92%). The CPAP showed an effective reduction of apnea-hypopnea index (26.77 to 7.38, $P < .0001$), as well as an increase in the mean oxygen saturation (81.87 to 88.00, $P = .0016$). The total nocturia urine volume was reduced after CPAP titration ($P = .0244$). The major impact of CPAP intervention was on the stage 1 and stage 2 sleep nocturia ($P = .001$ and $.04$, respectively), but there was no difference for REM nocturia (Table 1).

Conclusions: The urologists should be aware about the high prevalence of OSA in nocturia patients. CPAP therapy effectively reduces stage 1 and stage 2 sleep nocturia in OSA patients.

IPD16:

DEVELOPMENT OF A MODEL FOR DIAGNOSIS OF SUSPECTED UROLITHIASIS SPECIFIC TO TAIWAN AND JAPAN

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Purpose: To develop a safe and accurate diagnostic model for suspected urolithiasis with seasonal variation, which is of special concern in Taiwan and Japan.

Materials and Methods: We retrospectively reviewed the medical records of all patients who visited our emergency room (ER) from April 1, 2007 to October 31, 2014, with complaints of back, flank, or lower abdominal pain. A total of 80442 patients visited the ER during this period. In this population, we selected 446 patients who received a definitive diagnosis based on radiological images (328 had ureteral stones and 118 another disease), and who did not have the following exclusion criteria: lack of any back, flank, or lower abdominal pain; congenital hydronephrosis; abnormal vital signs (subjective or objective fever, or hypotension); positive leukocytes on urine dipstick or qualitative urinalysis; known active malignancy; known renal disease (creatinine > 1.5 mg/dl); insufficient examination (lack of urinalysis or lack of evaluation for hydronephrosis); and previous urologic procedures, including lithotripsy or ureteral stenting. Urolithiasis-related predictors derived with a multivariate logistic regression model were converted into integer points, and the total of the points was used for stratifying patients into groups with low, intermediate, and high risk for urolithiasis.

Results: Urolithiasis was associated with the hot season (July to September), male gender, nausea or vomiting, prior history of urolithiasis, duration of pain, microscopic hematuria, and hydronephrosis, yielding a score of 0–13. Patients were stratified into the low (0–5), intermediate (6), and high risk (7–13) groups. The prevalence of ureteral stones was 14.8%, 88.9%, and 98.6% in the low, intermediate, and high-risk groups, respectively. Acute aortic dissection in the high risk group and abdominal aortic aneurysm in the intermediate risk group were the most important differential diagnoses for urolithiasis.

Conclusion: Score stratification, and ruling out acute aortic dissection and abdominal aortic aneurysm, are essential components in developing a safe and accurate diagnostic model for suspected urolithiasis.

IPD17:

THE TREATMENT MODALITIES OF URETERAL STONES: A COMPARISON OF COST

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Purpose: Various studies have compared the cost-effectiveness between extracorporeal shock-wave lithotripsy (ESWL) and ureteroscopic lithotripsy (URSL) in the treatment of ureteral stones. This study aims to investigate the cost-effectiveness between ESWL and URSL on a national level in Taiwan.

Materials and Methods: The National Health Insurance Research Database (NHIRD) of Taiwan is a derivative of the National Health Insurance Program of Taiwan that covers more than 99% of the population. The Longitudinal Health Insurance Database 2000 (LHID2000) contains the claims filed by 200,000 randomized individual patients from the NHIRD. 28,513 cases of ureteral stone have been identified. We compared the total costs between patients who underwent different lithotripsy modalities within six weeks of diagnosis, in order to include the post-intervention costs.

Results: The total number of patients who received ESWL or invasive intervention within six weeks of initial diagnosis was 9,155 (32.1%). The mean medical cost was NTD 40,408 during the first six weeks after diagnosis when ESWL was used as the primary treatment modality, while in the case of URSL, the mean medical cost was NTD 38,224 ($p < 0.05$). The presence of comorbidities was also related to a statistically significant increase in costs during the six weeks after initial diagnosis of ureteral stone.

Conclusion: When ESWL was used as a primary treatment modality for an episode of ureteral stone, the cost of the entire course of treatment exceeds URSL significantly. This may assist health care providers to decide whether ESWL or URSL is more suitable for a particular patient with ureteral stone requiring intervention.

The paper can be assigned, per authors' agreement, to ☐oral presentation and/or poster presentation (please tick either or both boxes). Those papers that are not ticked will be considered intended for both.

IPD18:

NEW OPERATIVE METHOD USING GREEN LIGHT LASER -GLEP (GREEN LIGHT LASER ENUCLEATION OF PROSTATE)-

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Purpose: In Teikyo University urology, we start HoLEP (Holmium YAG Laser Enucleation of Prostate) in 2006 as transurethral prostatic enucleation and experience about 400 examples cases. More, We introduce PVP (Photo-Selective Vaporization of the Prostate) as transurethral prostatic enucleation technique from 2012.

Materials and Methods: PVP is the safe operative method which was superior in the perspiration efficiency and hemostasis power. However, for a treatment for large prostate, it is lined output limes of laser probe and experience and technology of a practiced hand. Therefore we report the operative method this time because we experienced GLEP (Green light laser enucleation of prostate) which is transurethral prostatic enucleation using PVP device. We call the operative method GLEP (Green light laser enucleation of prostate). Configuration of fiber has a large difference of operative method in GLEP and HoLEP.